

Industrial imaging

The new Dualis: pays attention to every detail of surfaces and contours



Vision sensors



Combinable 2D inspection of surfaces and contours for maximum quality assurance

User-friendly software simplifies inspection task set-up

Powerful algorithms master even demanding requirements

Reliable functioning in changing light conditions

Maladjustment monitoring ensures reliable quality control



Extraneous-light resistant search and find expert

Missing retaining clips, threads that have not been milled properly, too much adhesive or incorrectly shaped components: The new Dualis detects all this with ease – as well as any other deviation of an object from the specified target conditions. Surface areas, contours, omissions or object rotation can be checked and evaluated individually as well as in combination. Thanks to the integrated daylight filter, the Dualis is extremely resistant to extraneous light. The version with integrated polarisation filter is ideal for applications with particularly highly reflective objects.

The new Dualis is set up with the user-friendly ifm Vision Assistant software. Even complex tasks are quickly defined. Real-time maintenance options ensure reliable quality assurance. For example, changes in the continuously checked image sharpness and the image brightness indicate an unintentional maladjustment. In this case, the sensor can automatically issue a warning.



Design	Description	Interface	Order no.
Integrated in	frared illumination		
	Standard lens, angle of view 16°	EtherNet/IP, TCP/IP	O2D520
	Wide-angle lens, angle of view 30°	EtherNet/IP, TCP/IP	O2D522
	Telephoto lens, angle of view 10°	EtherNet/IP, TCP/IP	O2D524
	Standard lens, angle of view 16°	PROFINET, TCP/IP	O2D530
	Wide-angle lens, angle of view 30°	PROFINET, TCP/IP	O2D532
	Telephoto lens, angle of view 10°	PROFINET, TCP/IP	O2D534
Integrated R	GB-W illumination, with polarisation filter		
	Standard lens, angle of view 16°	EtherNet/IP, TCP/IP	O2D500
	Wide-angle lens, angle of view 30°	EtherNet/IP, TCP/IP	O2D502
	Telephoto lens, angle of view 10°	EtherNet/IP, TCP/IP	O2D504
	Standard lens, angle of view 16°	PROFINET, TCP/IP	O2D510
	Wide-angle lens, angle of view 30°	PROFINET, TCP/IP	O2D512
	Telephoto lens, angle of view 10°	PROFINET, TCP/IP	O2D514

Simply solve your application step by step:



A contour presence verification wizard supports you in solving simple contour presence checks. Even inexperienced users can set up the application within 2 minutes.



With the "user-defined mode", more complex applications as well as combinations of blob and contour detection can be



Using the blob presence verification wizard, you can easily set up an application to analyse blobs. Blobs are contiguous pixels that form an area. These areas can be checked for their size, shape or other properties.

Many options for perfect quality control

The Dualis is available with infrared or RGB-W illumination. The latter makes it possible to distinguish objects by their colour. Highly reflective objects can also be detected easily thanks to the polarisation filter.

In strongly fluctuating light conditions, the Dualis takes up to 5 images with different exposure times and then selects the optimally illuminated image for quality control.

Fast replacement thanks to memory stick

The Dualis is equipped with an ifm memory stick on which the parameters are stored. In the event of a device replacement, the stick can be used to easily transfer all settings and parameters required for operation to the new Dualis. This considerably reduces the workload.